

SOFTWARE HELP

Multiple Access table validation rules

Q I have a problem concerning validation rules in Access. I already have one validation rule on my table, but I want to add a second rule for a different set of fields. My existing rule says that the discount must not be greater than the overall cost. I now want to add a rule that if the payment method is credit card, the card number field must be completed.

A Houston

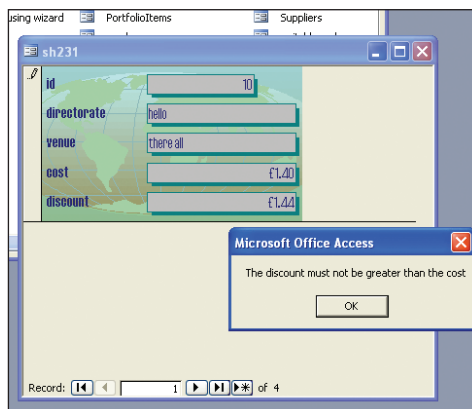
A To ensure that both tests are passed, you can simply extend your existing validation rule to require both rule one AND rule two. Your new rule will look like this:

```
(([payment type] <>"credit card") OR ([payment type]="credit card" AND [card number] Is Not Null)) AND ([cost]>[discount])
```

The problem lies in which message to show when the validation fails. There's no way to have separate messages for the different conditions; you can specify only one validation text. This means you must make do with this validation text:

"If the payment type is credit card, the card number field cannot be null. Also, the discount cannot be greater than the cost"

The more complex your rule becomes, the more confusing your validation message is going to get



▲ Use the form update event to make several validation checks with individual error messages

(and the more chance you have of errors creeping into your formula).

I'd be tempted to move all your validation checks to a data entry form. If you put the validation checks in the form's BeforeUpdate event handler, this will check the values the user has entered in the form before the record is saved. So, for example, your checks above could be entered as:

```
Private Sub Form_BeforeUpdate(Cancel As Integer)
If (Me![payment type]="credit card") And IsNull(Me![card number]) Then
MsgBox ("If the payment type is credit card, you must enter a card number")
Cancel = True
End If
If Me!frmdiscount > Me!frmcost Then
MsgBox ("The discount must not be greater than the cost")
Me!frmdiscount = Me!frmdiscount.OldValue
End If
End Sub
```

In the second check, we actually remove the value entered in the discount field using:

```
Me!frmdiscount = Me!frmdiscount.OldValue
```

To do this, we've used the OldValue property of the form control to reset the changed value back to the value that had previously been stored. We've also given the controls on the form different names from the underlying table fields, which is always good practice.

This resetting of the control can be useful, but it can also be annoying if the user has entered a long and complex value and made a one-digit mistake. Decide for yourself when it might be useful and when it might make your users grind their teeth in annoyance.

You can even be completely draconian if you wish. Consider the line:

```
Me.Undo
```

In the BeforeUpdate event handler, this will get rid of all the changes made to the record being displayed. **KE**

YOUR EXPERTS

Contact Software Help for software advice and answers

Kay Ewbank

Database developer and productivity expert Kay Ewbank offers help with office applications.



Ben Pitt

Professional musician and keen photographer Ben Pitt gives advice on using creative software.



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Editing software for DVD camcorders

Q Could you tell me if the Sony Vegas Movie Studio program is compatible with the 8cm DVD format as an input source?

Roy Andrews

A According to the Sony website, a new feature for version 6 is importing media from Sony DVD Handycam camcorders. This seems conclusive, but we double-checked with Sony that the software supports other brands of DVD video

cameras, too. A representative from Sony confirmed it does and she also pointed out that users can download a free trial version from www.sonymediasoftware.com/download to be completely certain.

The process is simple: go to File, Import, DVD Camcorder Disc..., browse to your camera, select a destination to copy the files to and click OK. Vegas then converts the .vob files into standard MPEG2 files so that you can use them in Vegas and other video software. **BP**



Specifying an image viewer for hyperlinks

Q I use the IrfanView program and have set it as the default for all my picture viewing. Normally this works fine. However, I have a database of around 4,500 photos in Microsoft Excel and have put in a column of hyperlinks pointing to the photos listed so I can view them while browsing the database. Unfortunately, the photos open in Microsoft Photo Editor instead of IrfanView. This is a nuisance because they come up showing only one greatly enlarged corner of the photo.

I tried similar hyperlinks in Microsoft Word as an experiment and these have the same problem. Presumably, Microsoft has arranged things so its Photo Editor program is always invoked by such hyperlinks. Do you have any idea how to change things so the hyperlinks open my pictures in IrfanView? I use Office XP.

Geoff Leggett

A There was a fix for this for Office 2000. A version of the fix works with all subsequent versions of Office we've tried, though you may have to do some fiddling. You need to edit the System Registry, so the usual caveats apply about creating a

system restore point first and being ultra-careful while editing.

We'll start with the instructions for Office 2000. First, go to Start, Run, and type regedit. This launches the Registry Editor. Look through the keys until you find this subkey:

HKEY_LOCAL_MACHINE/Software/Microsoft/Office/9.0/Common/Internet

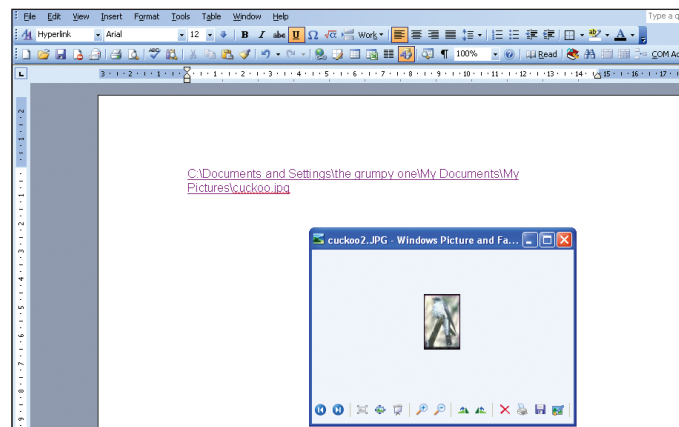
In the Edit menu, point to New and click DWORD Value. In the Value box, enter ForceShellExecute. On the Edit menu, click Modify. In the Value data box, type 1. Finally, close Registry Editor.

If you have a later version of Office, the steps are pretty much the same. With Office 2003 (Office 11), look for:

HKEY_LOCAL_MACHINE/Software/Microsoft/Office/11.0/Common/Internet

Add the same key as described above.

If you're running Office 2003 but used to have Office 2000 installed, this may not work. In this case, you have to carry out the steps for Office 2000 as well, even though it is no longer in use. **KE**



◀ You can set which picture editor opens from Office by editing the system Registry

Reformatting dates

Q I'm using Excel and I want to change dates from one format to another. The dates come from downloaded data and, for example, 9th February 2007 is written as 90207, while 10th February 2007 is written as 100207. I would like to convert these dates to the dd/mm/yy format.

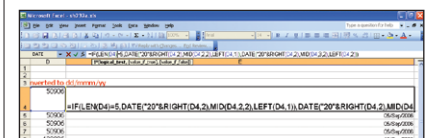
Eddie

A Your dates are stored in column D, so cell D27, for example, holds 50906. The formula to do the conversion has to first check the length of the date. If the date is five characters long, then to get the date you take the day element as the first character, the month as the next two characters and the year as the last two characters. If the original text date is six characters long, the day is given by the left-hand two characters, the month by the middle two characters and the year as the last two characters. Assuming all the dates are this century, you also need to add 20 to the start of the year element to get 2006 rather than 1906.

The functions we need to achieve this are Left, Mid and Right, If, Len and Date. Date expects its parameters in the order Year, Month, Date. Putting all this together, you get:

```
=IF(LEN(D4)=5,DATE("20"&RIGHT(D4,2),MID(D4,2,2),LEFT(D4,1)),DATE("20"&RIGHT(D4,2),MID(D4,3,2),LEFT(D4,2)))
```

This formula converts the numbers into a valid Excel date. You can then use cell formatting (select Format, Cells) to choose the custom format you want, which is dd/mm/yy. **KE**



▶ Use a combination of Left, Mid and Right to convert text dates to proper Excel dates

Help me get my head round plug-ins

Q I'm slowly finding my way with Cubase LE, which came bundled with my E-mu 0202 audio interface. I've managed to record a few tracks, but I don't understand the difference between insert and auxiliary plug-ins. What's the best way to use different plug-ins for a professional sound?

Gareth Metcalf

A When an effect is used as an insert, audio is passed through it. In Cubase LE, there are two insert slots available for each channel (located between the fader and the EQ curve in the screenshot). Auxiliary or 'aux' effects are configured so the effected sound is added to (rather than replacing) the unprocessed sound. Auxiliary

effects are shared for all channels, and Cubase LE supports up to four for each project. Each channel has four send controls (on the right of the screenshot below), allowing the user to add varying amounts of each aux effect for each sound in their mix.



▲ Sounds pass through insert effects, while aux effects add to rather than replace the clean signal

Any effect can be used either as an insert or an auxiliary effect, but certain types lend themselves to each method. Effects that change the sound itself are best used as inserts; these include EQ, compressors, gates and distortion. Effects that add something to the sound are best used as auxiliaries. These include reverb, delay, chorus and phaser effects.

With auxiliary channels the same effect can be shared across different channels in your mix; this is particularly welcome for reverbs, giving the impression that different instruments exist in the same acoustic space. But if you run out of aux effect channels and want to add another reverb or other effect that's normally used as an aux effect, you can use it as an insert. However, you'll need to reduce the effect's Mix control to allow some of the unprocessed sound through. **BP**

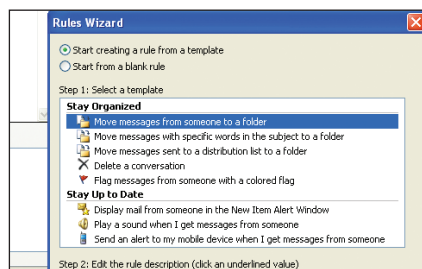
Automatically filing mail by the sending company

Q I run Office 2003 and use Outlook for email. I want to move messages from everyone at a particular company into a certain folder automatically. How can I achieve this?

P Green

A To do this, you need to start with a blank rule rather than using a rule template. Open your InBox, choose Tools, Rules and Alerts, and press the New Rule... button. Select Start from a blank rule and the option to check messages when they arrive. The condition to check for is 'with specific words in the sender's address'. Click the specific words placeholder and type the part of the email address you're looking for;

dennis.co.uk would be the entry to process all mail from Dennis Publishing, for example. The only other thing you need to specify is to which location the messages should be moved. **KE**

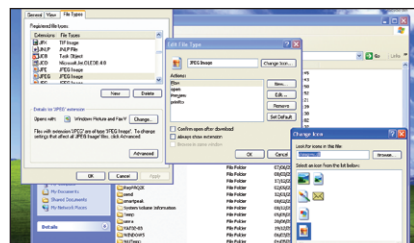


▲ Start from a blank rule in Outlook to check for messages from a particular organisation

My file icons are wrong

Q All my JPEG files have defaulted to GIF. They open correctly in Photoshop CS, but when saved they revert to GIFs with a spyglass icon. The file association shows GIF in the file type, but not Graphics Interchange Format. I've tried setting JPEG as the default image type. My images then appear as Omnipage Image files, with an Omnipage icon. The JPEGs still open in Photoshop.

Andy Taylor



▲ Check the settings in Tools, Folder Options to see which icons are specified for file types

A Usually, the solution to file types not being treated correctly is to check the file association settings.

However, if the software isn't behaving well, this doesn't work. When you tried this initial route, you found that the correct Adobe jpeg icon was shown in the list and yet the icons on the actual image files were for Omnipage. In this case, your only option is to edit the system Registry. As we always point out, be careful not to change anything unless you know what it is and what you're changing it to.

To set the image icon in the Registry, run Regedit. Navigate through until you get to:

HKEY_CLASSES_ROOT/jpegfile/DefaultIcon

Double-click on the Default entry in the right-hand pane and change the data value shown there to shimgvw.dll,3.

This restores the default icon for JPEGs. Once this Registry value is reset, you can change it to something more exotic if you like. **KE**

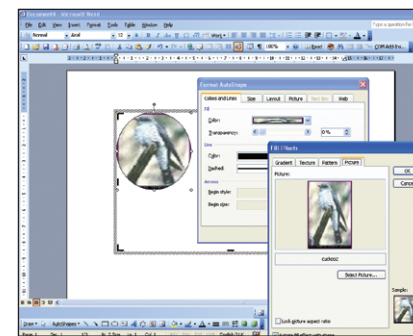
How do I crop a circular image?

Q I'm using Microsoft Word, and I've added a picture to my document that consists of a central circular part, some shading around it and a square border. I want to show just the central circular part. When I try cropping the image, though, I can only crop left, right, up and down. How do I crop to the bit I want?

D Horner

A The easy solution is to put your image into a circular shape in the first place. Draw a circle in your document as an AutoShape by using View, Toolbars, Drawing. Choose the oval option and draw your circle. You can make sure it's a circle rather than an oval by holding down the Shift key while dragging the mouse.

Once you've drawn your circle, you can right-click on it and choose the Format AutoShape option from the list of options that appears. In the Format AutoShape dialog, select the Colors and Lines tab, then select the Color option in the Fill section. From the choices shown, choose Fill Effects and then Picture. Then it's simply a matter of choosing the picture you want and setting the circle to the right size. **KE**



▲ You can use an autoshape to crop a picture to an unusual shape

What resolution for widescreen DVD menus?

Q I design DVD menu backgrounds in Paint Shop Pro X and import them into Premiere Elements 3. However, despite creating images at the correct 720x576 resolution for PAL, they appear with black bars on either side. Why?

Nathan Boyce

A You're getting black bars on your menus because the PAL format uses non-square pixels. Both standard aspect ratio and widescreen versions of PAL use 720x576 pixels per frame, but non-widescreen video is slightly stretched, giving an image shape equivalent to 787x576 square pixels. Widescreen stretches them even more, giving the impression of a 1,049x576 resolution.

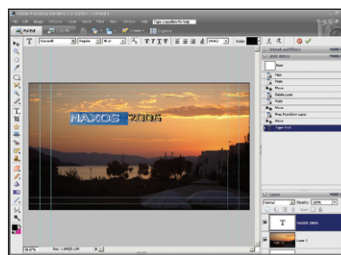
Rather than stretch your menu design by the same amount, Elements adds black bars.

There are three ways to deal with this problem. One is to design your menus with a 787x576 or 1,049x576 (for widescreen) resolution. Unfortunately, Premiere Elements will resize the image you design to 720x576, which can make a mess of text and other fine lines. Alternatively, you can design menus at 720x576, as you have been, but save them in JPEG or TIF format. Unlike the Photoshop PSD format, these formats don't

include pixel shape information, so Premiere is happy to stretch them to fit. The downside of this technique is that your menus look stretched on your final discs. On non-widescreen discs it

probably won't be noticeable for text and graphics, but squares, circles and people will look slightly squat.

Or you could consider using Photoshop Elements 5 to design your menus. This software supports non-square pixels, includes templates for PAL, NTSC and HDV frames, and will automatically scale imported images to retain their aspect ratio. **BP**



▲ Photoshop Elements' support for non-square pixels means it's ideal for designing DVD menu backgrounds



Finding values in an Excel range

Q I have found a curious anomaly with the OR function in Excel. The OR function does not behave as the Insert Function dialog box suggests. In the spreadsheet shown on the right, I want to test whether each number in column 2 is contained in column 1. I've put the formula I'm using in column 3:

=OR((R2C1:R6C1=RC[-1]))

Cells R2C3, R3C3 and R5C3 should all show TRUE and that's what the Insert Function dialog predicts. But upon entering the formula, only R3C3 shows as TRUE. Why is this happening?

Eric Downer

A We're not sure why Insert Function disagrees with the final calculated value, but it's probably confused by your use of the OR function. You can't use OR to make the comparison you're after. You need to use a combination of Match, ISNA and NOT. The first step is to use MATCH:

= MATCH(RC[-1],R2C1:R6C1,0)

	1	2	3	4	5
1	1				
2	2	34	FALSE	FALSE	
3	4	4	TRUE	TRUE	
4	5	17	FALSE	FALSE	
5	34	5	FALSE	TRUE	
6	4	54	FALSE	FALSE	
7					

▲ Use the MATCH function to find whether a value is present in a range

This function checks whether the value in the cell one to the left of the function is present in the range R2C1:R6C1. The 0 parameter tells Match that it should find an exact match.

Unfortunately, Match returns either the position of the value in the range or #N/A if the value isn't matched. So the next step is to check whether the function returns #N/A. To do this, we use ISNA:

=ISNA(MATCH(RC[-2],R2C1:R6C1,0))

This returns True if the cell contains #N/A and False otherwise, which is the exact opposite of what you want. So we then add a NOT:

=NOT(ISNA(MATCH(RC[-2],R2C1:R6C1,0)))

This gets you what you need, as shown in column 4 of the screenshot. **KE**

Creating a summary report in Access

Q I use Microsoft Access to track the maintenance work I manage. My database stores the equipment code for each item serviced as well as the details of the servicing. Some pieces of equipment have lots of records because they break down far too often.

I print a summary report of the work done, organised by equipment code. For each item of equipment, I want the report to print out only the three most recent records. Can you tell me how to do this?

J Peterson

A This is an interesting problem, because it sounds as if Access should have an easy solution, but it doesn't.

It's simple to create a query that shows the top N records in an entire record set – the top five orders by value, for instance. You create your query including all the fields, then click on the Top Values box in the query toolbar and change the value from All to the value of your choice, such as 5, 10% or whatever. However, it's more complicated to do the same thing to every group in a report. To do this, you need to enter a complex selection criterion instead.

Suppose you have a query that selects records from a table called Maintenance, including the columns EquipmentCode and MaintenanceDate. First you must use the Sort row to sort EquipmentCode Ascending and MaintenanceDate Descending. Make sure the Top Values box is set to All; otherwise Access gets in a terrible muddle. Then, in the criteria row of the MaintenanceDate column, enter the following selection criterion:

IN (SELECT TOP 3 [MaintenanceDate] FROM Maintenance M WHERE M.[EquipmentCode]=[Maintenance].[EquipmentCode] ORDER BY [MaintenanceDate] DESC)

This criterion creates a SQL subquery to which the MaintenanceDate is matched. Unless the MaintenanceDate is in the set of values returned by the subquery, the record won't get shown. The subquery first creates a working table called M that contains records with the same EquipmentCode as the one you're testing:

Maintenance M WHERE .[EquipmentCode]=[Maintenance].[EquipmentCode]

The name M is called an alias and is needed to distinguish the working table from the table the query is filtering. The subquery sorts the working table (ORDER BY [MaintenanceDate] DESC) and selects the top three records (SELECT TOP 3 [MaintenanceDate] FROM). So the query dynamically generates a list of the three most recent records. Finally, the criterion uses the IN operator to filter the date column using this dynamic list. **KE**

Photoshop is too slow

Q When I edit photos in Photoshop Elements, after a few minutes the software gets slower and slower to the point where it's barely usable. What's causing this, and is there any way to avoid it?

Ray Tennant

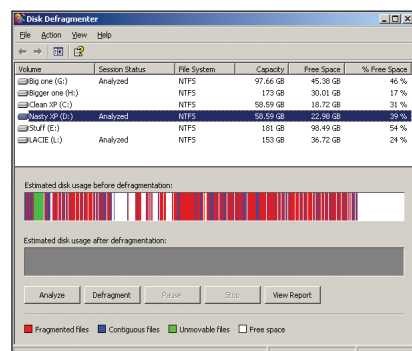
A There are several potential culprits, all stemming from the fact that Photoshop Elements, like many other image editors, keeps an undo history; these are different versions of your image document for each edit you've performed. These are stored in the computer's RAM as far as possible, but after a few edits it's usually necessary to start buffering the data to hard disk. While a 10-megapixel JPEG image may consume only a

couple of megabytes of disk space, the uncompressed file will be about 30MB once it's open in Photoshop Elements.

The most effective but expensive solution is to upgrade the amount of RAM in your computer. However, this might not be necessary. Using the hard disk to buffer data shouldn't have a disastrous impact on performance, so it's worth checking whether your hard disk is fragmented, and defragmenting it if necessary. Windows' Disk Defragmenter tool can be found in the Start menu, Programs, Accessories, System Tools. This tool doesn't require any explanation, you just follow its instructions.

If you have more than one internal hard disk, it's worth experimenting with Photoshop's scratch disk settings. The scratch disk is the hard disk partition used for buffering data. By default, this is the C: drive, but if possible it's worth using a different hard disk to the one used by Windows' swap file, where Photoshop Elements is installed and where the files on which you are working are located. However, there's no benefit to using a separate partition on your primary hard disk; it needs to be a separate physical hard disk to reap any benefits. You can define up to four scratch disks in Photoshop Elements by clicking Edit, Preferences, Plug-Ins & Scratch Disks.

Finally, you can try reducing the number of undo points available, although this has obvious practical consequences if you want to undo a large number of edits. You can do this in the Preferences, General dialog box. **BP**



▲ Lots of red means your hard disk needs to be defragmented